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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 05/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/203,086	PHILLIPS ET AL.
	Examiner	Art Unit
	Steven HD Nguyen	2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) Interview Summary (PTO-413) Paper No(s) _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 1-13 are withdrawn in view of the newly discovered reference(s) to McHale, Wu and Bardutz. Rejections based on the newly cited reference(s) follow.

Claim Objections

2. Claim 8 is objected to because of the following informalities: the recitation "the destination terminal" should be changed to – the destination original terminal --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As claim 2, the recitation "the destination original terminal" is vague and indefinite because it does not refer to any previous elements. Is it the original destination terminal.

There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 3-7 and 9-13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6178179.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims 1, 3-7, 9-13 are encompassed claims 1-9 of the US patent 6178179 such as a central office for transmitting a signal via XDSL transceiver and a translator “regenerator” including a encoder “line code translator”, decoder and line driver for transmitting a variable or fixed rate to the end user. However, Phillips does not disclose a translator is disposed at a predetermined distance from the central office wherein the SNR is reach a minimum threshold of quality signal (it is implicitly).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-4, 7, 9-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHale (USP 5905781) in view of Bardutz (USP 4766606) and Wu (USP 6219378).

Regarding claims 1, 3-4, 7, 9-10 and 13-14, McHale discloses a central office including a XDSL transceiver for transmitting a video, digital and telephone signals to the end users and receiving the data signals (Fig 4, Ref 160 is an XDSL modem at the central office of Fig 1, Ref 14) and a user has a XDSL transceiver (Fig 1, Ref 30 which includes ADSL and VDSL) for receiving a video signal (Video on demand) via twisted pair copper cable and transmitting data signals to the central office (See col. 6, lines 55-67) and an addition communication technology that extend the maximum length and quality of communication signal (Col. 7, lines 5-15). However, McHale does not discloses a regenerator which disposes between the central office and the end user, having a transceiver, a decoder and encoder. In the same field of endeavor, Wu discloses a repeater which disposes between the central office and the end user for boosting the signal if the distance between the central office and end user is greater than a predetermined distance (See Fig 1 and col. 4, lines 25-60) and Bardutz discloses (Col 2, lines 45 to col. 4, lines 14) a repeater “regenerator” (Fig 1, Ref Rep 1) which disposes between the central office (Fig 1, Ref office terminal), includes a receiver for receiving a signal (col. 2, lines 51, coupling means), a decoder (col. 2, lines 55-60, data recovery means) for decoding the payload of a received signal into a base data, a encoder (Col. 2, lines 60-65) for encoding and repacking the base data into a desired protocol format and a line driver (Col. 2, lines 52-53, the regenerated signals is recoupled to the line) for retransmitting the encoded signals to the end user wherein the repeater is disposed

at a predetermined distance where the SNR of the signal is reached to a threshold of minimum acceptable signal quality (it is implicitly).

Since, McHale suggests an addition communication technology that extend the maximum length and quality of communication signal (Col. 7, lines 5-15), Wu suggests a repeater must be placed between the central office and the user if a distance between the central office and user is over a predetermined distance to boost the quality of signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a repeater between the central office and the end user as disclosed by Bardutz into Wu and McHale's telecommunication system. The motivation would have been to prevent a signal to be degraded and reduce cost.

8. Claims 2, 5-6, 8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over McHale, Vu and Bardutz as applied to claims 1 and 7 above, and further in view of Fosmark (USP 6084881).

Regarding claims 2 and 8, McHale, Vu and Bardutz do not disclose a repeater for repackaging the base data into ATM protocol or a direct transmission protocol format depending on the protocol requirements of the destination terminal. However, Fosmark discloses a XDSL transceiver for selecting between a direct transmission protocol "Ref 72 and 66" and ATM protocol "Ref 66 and 70" to repackaging the base data for transmitting to the destination terminal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method of selecting between a direct transmission protocol "Ref 72 and 66" and ATM protocol "Ref 66 and 70" to repackaging the base data as disclosed by

Fosmark into McHale's telecommunication system. The motivation would have been to prevent a signal to be degraded and reduce cost.

Regarding claims 5-6 and 11-12, McHale, Vu and Bardutz do not disclose the claimed invention. However, a transceiver for generating a fixed rate and variable rate is well-known and expected in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a transceiver for generating a fixed rate and variable rate into a McHale, Vu and Bardutz's telecommunication system. The motivation would have been to prevent a signal to be degraded and reduce cost.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eames (USP 6282189) discloses a unified access platform for simultaneous delivering voice and cell based service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Art Unit: 2665

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Steven HD Nguyen

Art Unit 2665

May 4, 2002



HUY D. VU
PRIMARY EXAMINER